

## **REMARKS**

By this amendment, Applicant adds new claims 21-24. Accordingly, claims 1-24 are now pending in this application.

In the Office Action<sup>1</sup>, the Examiner took the following actions:

rejected claims 1-5 and 7-20 under 35 U.S.C. § 102(e) as being anticipated by JP 2001-296891 to Nogi Kazuyuki (hereinafter "Nogi"); and

rejected claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Nogi in view of Chang et al. (U.S. Patent No. 6,469,732) (hereinafter "Chang").

### **I. REJECTION OF CLAIMS 1-5 AND 7-20 UNDER § 102(e)**

Applicant respectfully traverses the rejection of claims 1-5 and 7-20 under 35 U.S.C. § 102(e) as being anticipated by Nogi. Nogi does not teach each and every element of Applicant's claims for at least the following reasons.

To properly anticipate Applicant's claimed invention, the Examiner must demonstrate the presence of each and every element of the claim in issue, either expressly described or under principles of inherency, in a single prior art reference. Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." See M.P.E.P. § 2131, quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Finally, "[t]he elements must be arranged as required by the claim." M.P.E.P. § 2131. In this

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<sup>1</sup> The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicant declines to automatically subscribe to any statement or characterization in the Office Action.

application, the rejection is improper because the Examiner has not demonstrated the presence of each and every element of Applicant's claims.

Independent claim 1 recites a directional setting apparatus comprising, among other things, "a voice recognition unit which detects a certain voice included in the sound signal outputted from the microphone array and **sets a directional determination period indicating a detection period of said certain voice, if it is determined that the certain keyword is included,**" "a voice direction detector which detects an **occurrence direction of said certain voice** included in the sound signals outputted from the plurality of microphones in **said directional determination period,**" and "a directional controller which **controls directivity of a prescribed apparatus based on the occurrence direction** detected by the voice detection detector." (emphases added).

As claimed and set forth above, the "certain keyword" is used to set the directional determination period and the "certain keyword" is used to control directivity. Applicant's specification discloses an embodiment in which a "certain keyword" is, for example, a word indicating a start of an utterance and in which a "certain voice" is, for example, a voice uttered by a certain person. See specification at page 6, lines 14-21. Furthermore, as claimed, the directional determination period is set if the "certain keyword" is included in the sound signal and the "certain voice" is used to control directivity of the prescribed apparatus.

In contrast, Nogi discloses performing voice recognition and setting directivity based only on a keyword. For example, Nogi discloses that "[k]eyword input signals from a voice input section 1 are stored in a voice buffer section 2." Abstract. Next, "[a]

directivity adjusting section 3 changes the directivity of the signals and a voice recognition section 5 conducts recognition processes for the signals.” *Id.* Then “[a] degree of agreement discrimination section 45 discriminates a directivity having high degree of agreement among the recognition results.” *Id.* However, Nogi does not teach or suggest that a “certain keyword” and a “certain voice” are separately used to set the directional determination period and control directivity, respectively, because Nogi begins voice recognition and setting of directivity using the same keyword. Therefore, Nogi does not teach or suggest at least “a voice recognition unit which detects a certain voice included in the sound signal outputted from the microphone array and **sets a directional determination period indicating a detection period of said certain voice, if it is determined that the certain keyword is included,**” “a voice direction detector which detects an **occurrence direction of said certain voice** included in the sound signals outputted from the plurality of microphones in **said directional determination period,**” and “a directional controller which **controls directivity of a prescribed apparatus based on the occurrence direction** detected by the voice detection detector,” as recited in independent claim 1 (emphases added).

For at least the above reasons, Nogi does not teach each and every element of claim 1 and, accordingly, the reference does not anticipate the claim. Furthermore, claims 2-5 and 7-17 depend from claim 1 and are not anticipated by Nogi at least due to their dependence. Independent claims 18, 19, and 20, although of a different scope from claim 1 and each other, include similar recitations as claim 1. Accordingly, claims 18, 19, and 20 are not anticipated by Nogi for at least the reasons discussed above in

connection with claim 1. Therefore, the Examiner should withdraw the rejection of claims 1-5 and 7-20 under 35 U.S.C. § 102(e).

## **II. REJECTION OF CLAIM 6 UNDER § 103(a)**

Applicant respectfully traverses the rejection of claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Nogi in view of Chang. A *prima facie* case of obviousness has not been established for at least the following reasons.

The key to supporting any rejection under 35 U.S.C. § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. See M.P.E.P. § 2142, 8th Ed., Rev. 6 (Sept. 2007). Such an analysis should be made explicit and cannot be premised upon mere conclusory statements. See id. “A conclusion of obviousness requires that the reference(s) relied upon be enabling in that it put the public in possession of the claimed invention.” M.P.E.P. § 2145. Furthermore, “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art” at the time the invention was made. M.P.E.P. § 2143.01(III), internal citation omitted. Moreover, “[i]n determining the differences between the prior art and the claims, the question under 35 U.S.C. § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious.” M.P.E.P. § 2141.02(I), internal citations omitted (emphasis in original).

“[T]he framework for the objective analysis for determining obviousness under 35 U.S.C. 103 is stated in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1996) .

... The factual inquires ... [include determining the scope and content of the prior art and] ... [a]scertaining the differences between the claimed invention and the prior art.” M.P.E.P. § 2141(II). “Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art.” M.P.E.P. § 2141(III).

Claim 6 depends from claim 1 and, accordingly, includes all elements thereof. As discussed above, Noji does not disclose or suggest each and every element of claim 1, from which claim 6 depends. Chang does not compensate for the deficiencies of Noji that were discussed above. Instead, the Examiner alleges that Chang “discloses said prescribed apparatus is ... [an] image pick-up device; and said directional controller controls [an] image pick-up direction of said image pick-up device based on the detection result of said voice direction dectector.” Office Action at page 8. Even if the Examiner’s allegation is correct, which Applicant does not concede, Chang also does not teach or suggest at least “a voice recognition unit which detects a certain voice included in the sound signal outputted from the microphone array and sets a directional determination period indicating a detection period of said certain voice, if it is determined that the certain keyword is included,” “a voice direction detector which detects an occurrence direction of said certain voice included in the sound signals outputted from the plurality of microphones in said directional determination period,” and “a directional controller which controls directivity of a prescribed apparatus based on the occurrence direction detected by the voice detection detector,” as recited in independent claim 1, and required by claim 6.

In view of the above, the Office Action has neither properly determined the scope and content of the prior art nor properly ascertained the differences between the prior art and the claimed invention. Furthermore, no reason has been clearly articulated as to why the claim would have been obvious to one of ordinary skill in view of the prior art. Accordingly, the cited prior art does not render obvious claim 6 at least due to its dependence from independent claim 1 and a *prima facie* case of obviousness has not been established. Therefore, the Examiner should withdraw the rejection of claim 6 under 35 U.S.C. § 103(a).

### **III. NEW CLAIMS 21-24**

New independent claims 21 and 23 include recitations that are not taught or suggested by the cited references. Furthermore, new claims 22 and 24 are allowable at least due to their dependence from independent claims 21 and 23, respectively.

**CONCLUSION**

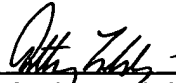
In view of the foregoing, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: June 19, 2008

By:   
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Anthony J. Lombardi  
Reg. No. 53,232